

ABSTRACT OF DISCLOSURE

For achieving a transmission light source having different transmission properties or characteristics, i.e., the α parameters, depending upon application thereof, in a light
5 emission element of semiconductor EA modulator integrated type being constructed with a light emission portion for lasing with a single vertical mode and a plurality of EA modulators, wherein an absorption edge wavelength under the condition of applying no bias thereto, in the semiconductor multiple-quantum-well
10 structure owned by the modulator which is near to an emission side of the light emission portion, is to be equal or longer than the absorption edge wavelength owned by the modulator positioned far from the emission side of the light emission portion.